



# **Lesson Preparation book**

## **Computer**

### **2<sup>nd</sup> Prep - Second Term 2024**



**Prepared and Designed by/ جروب فريق أصدقاء الكمبيوتر المتخصص**

**Yasmin Shoaeb**



## Teacher's Biography

**Name:** .....

**School:** .....

**The educational administration:** .....

**Qualification:** .....

**Teaching Subject:** .....

**Comprehensive School:** .....

**The school to which he is delegated:** .....

**Date of appointment:** .....

**The job is on the staff:** .....

**Teacher Code:** .....

**Mobile Number:** .....

**Teacher**

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**Supervisor**

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**School Principal**

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# Daily class schedule



| Session Day | First | Second | Third | Fourth | Fifth | Sixth | Seventh |
|-------------|-------|--------|-------|--------|-------|-------|---------|
| Saturday    |       |        |       |        |       |       |         |
| Sunday      |       |        |       |        |       |       |         |
| Monday      |       |        |       |        |       |       |         |
| Tuesday     |       |        |       |        |       |       |         |
| Wednesday   |       |        |       |        |       |       |         |
| Thursday    |       |        |       |        |       |       |         |

| Session Day | First | Second | Third | Fourth | Fifth | Sixth | Seventh |
|-------------|-------|--------|-------|--------|-------|-------|---------|
| Saturday    |       |        |       |        |       |       |         |
| Sunday      |       |        |       |        |       |       |         |
| Monday      |       |        |       |        |       |       |         |
| Tuesday     |       |        |       |        |       |       |         |
| Wednesday   |       |        |       |        |       |       |         |
| Thursday    |       |        |       |        |       |       |         |

Teacher

Supervisor

School Principal

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# Distribution of computer and information technology content



For 2<sup>nd</sup>.Prep - 2024

Second Term

| Week | Activity   | Accompanying activities  |
|------|--|--|
| 1    | (Unit One)<br>Form & some form tools                       | <ul style="list-style-type: none"> <li>Explains HTML commands</li> <li>Uses HTML commands to produce an interactive web page</li> <li>Performs some operations )add field / add button Radio Button( in HTML</li> </ul>  |
| 2    | HTML & some form tools                                     | <ul style="list-style-type: none"> <li>Explains some elements of HTML (Checkbox &amp; Button &amp; Submit button &amp; Reset button)</li> <li>Writes HTML commands correctly</li> </ul>  |
| 3    | The project  | <ul style="list-style-type: none"> <li>Design a web page to record your data</li> </ul>  |
| 4    | (Unit two)<br>Basic concepts of Java Script                | <ul style="list-style-type: none"> <li>Recognize some basic concepts of the Java Script language</li> <li>Recognize basic rules for creating a Web page using Java Script commands</li> <li>Precisely write Java Script code</li> </ul>  |
| 5    | Call Java Script Code                                      | <ul style="list-style-type: none"> <li>Learn how to call Java Script code using a button command button.</li> <li>Learn what a Function is</li> <li>Writes the function call code</li> <li>Employs the Java Script programming language tools in an interactive project</li> </ul>                                       |
| 6    | The branching If Statement                                 | <ul style="list-style-type: none"> <li>Uses some Java Script commands to create a web page</li> <li>Solve examples using the if condition</li> <li>Collaborates with colleagues in carrying out learning activities</li> </ul>   |
| 7    | Verify the correctness of the data entered in the web page | <ul style="list-style-type: none"> <li>Verify the correctness of the data entered in the web page</li> <li>It discusses the validity of the data entered in the web page</li> <li>Performs data entry operations on the web page</li> <li>His classmates enter some students' data on the interactive webpage</li> </ul> |
| 8    |  |  |



| Week | Activity  | Accompanying activities  |
|------|---|--|
| 9    | Follow verify the correctness of the data entered in the web page | <ul style="list-style-type: none"><li>• Verify the correctness of the data entered in the web page</li><li>• It discusses the validity of the data entered in the web page</li><li>• Performs data entry operations on the web page<br/>His classmates enter some students' data on the interactive webpage</li></ul>  |
| 10   | The project   | <ul style="list-style-type: none"><li>• Design an interactive web page</li><li>• It develops the interactive web page</li><li>• Compare between static and interactive web page</li></ul>  |
| 11   |   |  |
| 12   | (Unit three)<br>Safe use of the Internet                          | <ul style="list-style-type: none"><li>• Recognize common concepts of Internet users (identity theft – malware – spyware ... )</li><li>• He mentioned the largest number of ideas about the situations that Internet service users may encounter</li><li>• Designs an electronic board for bad internet usage situations</li><li>• Explains guidelines for safe use of Internet services</li><li>• He appreciates the importance of the safe use of Internet services in our life</li></ul> |
| 13   | <b>General review + practical test</b>                            |  |
| 14   |   |  |



## The General Objectives of Computer

- \* Providing students with the appropriate amount of scientific and basic knowledge and skills related to information technology.
- \* Develop basic scientific thinking skills with a focus on modern technological skills through their interaction with the computer.
- \* Training students to work in a team by practicing computer techniques.
- \* Developing self-education skills in order to access the correct information by themselves through the use of computers.
- \* Developing students' awareness of the importance of using computers in all areas of life.
- \* Students' appreciation of the role that computers play in problem solving.
- \* Students familiarize themselves with the computer and deal with its programs without intimidation.
- \* Developing the Egyptian personality capable of facing the challenges of the third millennium in the technology and information revolution.
- \* Acquiring the right ethics and behaviors in dealing with others through the means and tools of information and communication technology.

**Teacher**

**Supervisor**

**School Principal**

# The specified objectives of computer



At the end of the second term the student will be able to:

- ✓ Know the main concepts and terminologies of the technology of information and communication system.
- ✓ Understanding all the sides of safe thinking connected to using information and communication technology.
- ✓ Using (Java script – HTML) languages in supporting our learning.
- ✓ Using some Java script commands to create a web page.
- ✓ Designing an interactive web page using programs operations and technology tools.
- ✓ Recruiting technology tools in exchanging information between others.
- ✓ Using electronic resources in dealing with information.
- ✓ Collecting all sides of security thinking (Cultural – Social – Ideological – Ethical) using communication and information technology.

Teacher

Supervisor

School Principal

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|         |  |  |  |
|---------|--|--|--|
| Date    |  |  |  |
| Session |  |  |  |
| Class   |  |  |  |



## Unit One (**Websites**) Lesson (1) Form

|               |  |
|---------------|--|
| Strategy      | Dialogue, discussion and brainstorming- cooperative learning |
| Teaching aids | White board – Data show – Scratch program                    |

### Lesson objectives:

By the end of the lesson, the student should be able to:

- 1- Know the meaning of form.
- 2- Explain the HTML tags in creating an interactive webpage.
- 3- Subscribe with his friends in designing projects.

### Warm up:

What do you know about webpage?

### Lesson Presentation:

#### Form :

Through it, you can add a set of elements to the web page such as

(buttons and fields) that you use to enter your data for the purpose of sending it to the website to be stored



#### Textbox:

It helps the page visitor to enter text data by typing inside the box using the keyboard using the tag `<input type = "text">`



#### Password:

The symbol \* appears when typing inside it to hide the content of the real



#### Radio Button:

Radio button :It helps you to choose only one alternative out of several  
`<input type="radio" name="a"> male`  
`<input type="radio" name="a"> Female`

### Evaluation:

Complete: To add a field to write student name use the tag

.....

|         |  |  |  |
|---------|--|--|--|
| Date    |  |  |  |
| Session |  |  |  |
| Class   |  |  |  |



## Unit One (Websites) Lesson (2) Form 2

|               |  |
|---------------|--|
| Strategy      | Cooperative Education - Practical Training |
| Teaching aids | White board – Data show – Scratch program  |

### Lesson objectives:

By the end of the lesson, the student should be able to:

- 1- Explain some Html tags.
- 2- Write the HTML tags in a right way.
- 3- Know the importance of HTML language.

### Warm up:

How do you can you use add other tools to (save – erase) data in the form?



### Lesson Presentation:

#### Checkbox:

You to select more than one option from checkbox at the same time  
(several alternatives)  
`<input type="checkbox">Arabic`

#### Button input field:

It can perform many functions such as recording/clearing your data, calling a function  
`<input type="button" value="ok">`



#### Submit button:

By clicking on it, your data that you entered Through the form elements will be sent to another page (by adding the action property of the form)

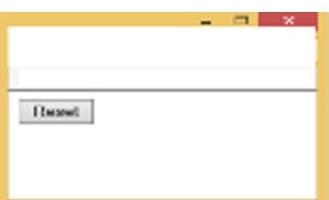
`<input type="submit">`



#### Reset button:

It is used to delete previously entered values and return to the default values for the tools

`<input type="reset">`



### Evaluation:

**Complete:** The tag used to add a checkbox .....

|         |  |  |  |
|---------|--|--|--|
| Date    |  |  |  |
| Session |  |  |  |
| Class   |  |  |  |



## Unit One (Website) Lesson (3) Project

### Strategy

Dialogue, discussion and  
brainstorming

### Teaching aids

White board – Data show –  
Scratch program

### Lesson objectives:

By the end of the lesson, the student should be able to:

- 1- Identify the main HTML tags to design an interactive webpage.
- 2- Save his project in a right way.
- 3- Understand importance of HTML.

### Warm up:

Design your web page?

### Lesson Presentation:

```
<html>
<head>
<title></title>
</head>
<body dir='rtl'>      توجة الصفحة من اليمين الى اليسار
<center>            توسيط الانواع داخل الصفحة
<form action='pro.php'>    ترسل البيانات الى الصفحة Pro.php تسجيل بيانات طالب
<input type='text'><br><br><br>    تسجيل بيانات طالب والاسم
<input type='password'><br><br><br>    كلمة المرور
<input type='password'><br><br><br>    تأكيد كلمة المرور
<input type='text'><br><br><br>    السن بالأرقام
<input type='radio'><input type='radio' checked="" value="ذكر">    النوع ذكر امرأة أو ذكر أخرين
<br><br><br>    ذكر المختار بعد الدليل
<input type="checkbox" value="انجليزي"/>    لغة الإجابة انجليزي فرنسي صيني
<input type="checkbox" value="فرنسي"/>
<input type="checkbox" value="صيني"/>
<br><br><br>    مسافة ثلاثة سطور
<input type="reset" value="جديد"/>    حذف البيانات القديمة واستخدامها لاستكمال بيانات جديدة
<input type="submit" value="تسجيل"/>    إنشاء زر Submit وقيمتة اي اسماء تسجيل لإرسال البيانات وتسجيدها
</center>
</form>
</body>
</html>
```

أوامر نهاية الكود

### Evaluation:

Evaluating student's projects

|         |  |  |  |
|---------|--|--|--|
| Date    |  |  |  |
| Session |  |  |  |
| Class   |  |  |  |



|               |   |
|---------------|---|
| Strategy      | Dialogue, discussion and brainstorming    |
| Teaching aids | White board – Data show – Scratch program |

## Unit Two (Java Script) Lesson (1) Java script concepts

**Lesson objectives:** By the end of the lesson, the student should be able to:

- 1- Identify the main concepts of Java script.
- 2- Get the skill of Java script tags in a right way.
- 3- Understand importance of learning Java script.

**Warm up:**

How can you use java script language?

**Lesson Presentation:**

**JavaScript basics:**

- 1- JavaScript commands are called Statements.
- 2- Statements are written inside the Html code
- 3- Write commands and instructions `<script></script>`
- 4- Each Statement must end with a semicolon(:)
- 5- The letter case must be considered while writing JavaScript statements.

**Alert statement:** is used to display a message inside a box, which attracts attention to read it

```
<script>
alert "Welcome!"
</script>
```



**Document.write statement:**

The document.write statement is used to show a written message on the web page itself

```
<script>
Document.write ("Computer and Information Technology
Subject")
</script>
```

**Evaluation:**

Complete: We use alert statement to .....

|         |  |  |  |
|---------|--|--|--|
| Date    |  |  |  |
| Session |  |  |  |
| Class   |  |  |  |



|               |   |
|---------------|---|
| Strategy      | Dialogue, discussion and Cooperative Learning |
| Teaching aids | White board – Data show – Scratch program     |

## Unit Two (JavaScript) Lesson (2) Calling Java Script

### Lesson objectives:

By the end of the lesson, the student should be able to:

- 1- Know the meaning of “Function”.
- 2- Write the code of calling function in a right way.
- 3- Help friends in their projects.

### Warm up:

Can you call the function anytime?

### Lesson Presentation:

#### Function:

It is JavaScript statements grouped together , named block and performed according to call it, and it must be given a suitable name to the function that indicates its function and takes two paths

#### To Create a function (containing JavaScript statements):

- 1- Write the command function and then write

function name() an appropriate name for the function (preferably code to be executed indicating its function)

- 2- write the code that will be executed inside brackets{} to be executed when calling the function

```
Function name()
{
    Function code
}
```

#### To Call the function (to execute the commands that it script

- 1- Add a button command
- 2- Add the onclick property to the command button
- 3- The onclick property whose value is the name of the script

```
<input type="button" onclick="country()" value="click me">
```

#### Dealing with textbox content:

```
<script>
function country()
{
    alert(form1.t1.value);
}
</script>
</body>
</html>
```



### Evaluation:

Put ✓ or X: We can call the function without its name ( )

|         |  |  |  |
|---------|--|--|--|
| Date    |  |  |  |
| Session |  |  |  |
| Class   |  |  |  |



## Unit Two (JavaScript) Lesson (3) If statement

Strategy

Dialogue, discussion and  
Cooperative Learning

Teaching aids

White board – Data show –  
Scratch program

### Lesson objectives:

By the end of the lesson, the student should be able to:

- 1- Identify some javascript commands.
- 2- Solve some exercises using if condition.
- 3- Cooperate with his friends in doing some exercise.

### Warm up:

Can you execute a part of the code when the code is true?

### Lesson Presentation:

#### Branching:

Sometimes we may need to implement or not execute commands or sentences depending on the result of a test (conditional expression).

### How to write if conditional statement

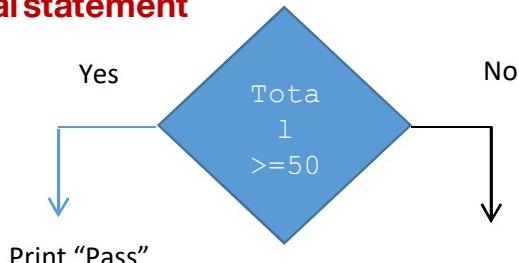
#### If Conditional

{

statement

Code

}



- The code will be executed if the condition is true
- The code will not be executed if the condition is false

### Evaluation:

Put ✓ or X:

If the condition is true the code will be executed ( )

|         |  |  |  |
|---------|--|--|--|
| Date    |  |  |  |
| Session |  |  |  |
| Class   |  |  |  |



|               |   |
|---------------|---|
| Strategy      | Dialogue, discussion and Cooperative Learning |
| Teaching aids | White board – Data show – Scratch program     |

**Unit Two (Java Script)**  
**Lesson (4) Validate data entered into web page**

**Lesson objectives:**

By the end of the lesson, the student should be able to:

- 1- Discuss the validation of the entered data.
- 2- Input some data.
- 3- Cooperate with his friends in creating an interactive webpage.

**Warm up:**

How can you make sure that the field is not empty?

**Lesson Presentation:**

**Data validation:**

It is the process of controlling the data entered in case of :]

**1- Leaving blank fields.(Required field)**

```
if(form1.text1.value=="")
```



**Validate data entered into web page conditions:**

Leave blank fields.

Writing an unlimited number of letters and numbers in the field

Password mistakes

Entering any type of data in one field

**Evaluation:**

**Complete:**

The code responsible for making sure of data in a field .....

|         |  |
|---------|--|
| Date    |  |
| Session |  |
| Class   |  |



|               |   |
|---------------|---|
| Strategy      | Dialogue, discussion and brainstorming    |
| Teaching aids | White board – Data show – Scratch program |

**Unit Two (JavaScript)  
Lesson (5) Validate data entered  
into web page 2**

**Lesson objectives:**

By the end of the lesson, the student should be able to:

- 1- Discuss the validation of the entered data .
- 2- Input some data.
- 3- Cooperate with his friends in creating an interactive webpage .

**Warm up:**

How can you make the field receive numeric data only?

**Lesson Presentation:**

Controlling the length of characters entered in the field.

```
alert("password must not be greater than 8 characters");
return false;
```



Matching the data entered into two fields

```
alert(" two words are validated");
return false;
```



prevent a wrong type of data

```
alert(" enter numeric data");
return false;
```



**Evaluation:**

Complete:

To validate two passwords the we use the condition .....

|         |  |  |  |
|---------|--|--|--|
| Date    |  |  |  |
| Session |  |  |  |
| Class   |  |  |  |



|               |   |
|---------------|---|
| Strategy      | Dialogue, discussion and brainstorming    |
| Teaching aids | White board – Data show – Scratch program |

## Unit Two (JavaScript) Lesson (6) project

**Lesson objectives:**

**By the end of the lesson, the student should be able to:**

- 1- Design an interactive webpage.
- 2- Compare between static and interactive webpages .
- 3- Understand importance of HTML– JavaScript .

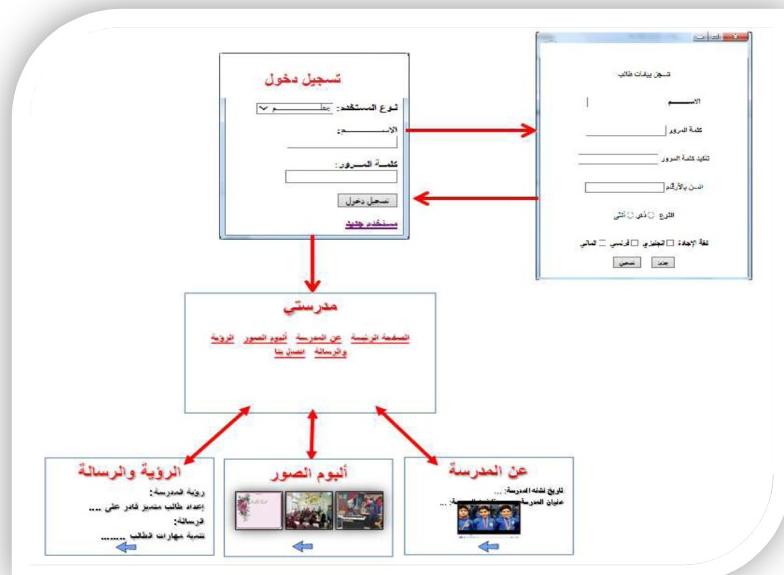
**Warm up:**

**Can you design a project?**

**Lesson Presentation:**

**After making sure of entered data validation, add a webpage to enter data and make sure of :**

- ✿ Leave blank fields.
- ✿ Writing an unlimited number of letters and numbers in the field
- ✿ Password mistakes
- ✿ Entering any type of data in one field



**Evaluation:**

**Evaluate the student's projects**



|         |  |  |  |
|---------|--|--|--|
| Date    |  |  |  |
| Session |  |  |  |
| Class   |  |  |  |



## Unit Two (JavaScript) Lesson (7) HTML5

|               |   |
|---------------|---|
| Strategy      | Dialogue, discussion and brainstorming    |
| Teaching aids | White board – Data show – Scratch program |

### Lesson objectives:

By the end of the lesson, the student should be able to:

- 1- Identify the new advantages of using HTML.
- 2- Write code in the right way.
- 3- Recognize the importance of using HTML.

### Warm up:

What do you know about HTML?

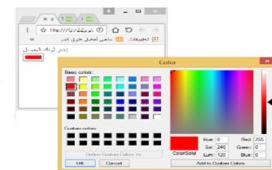
### Lesson Presentation:

color box:

Allows the user to choose a color through the color box

How to write the tag:

`<input type="color">`



Date box:

Allows the user to enter a specific date in the calendar window

How to write the tag:

`<input type="date">`



Number box:

This tool is created on the web page to enter values that must be numeric and a specific range for these values can be specified

How to write the tag:

`<input type="number" min="1" max="20">`



Using the Required property:

When using this feature, this requires that a value be

How to write the command:

`<input type="text" Required>`



### Evaluation:

Complete: ..... Is a new version of HTML appeared in 2014

|         |  |  |  |
|---------|--|--|--|
| Date    |  |  |  |
| Session |  |  |  |
| Class   |  |  |  |



|               |   |
|---------------|---|
| Strategy      | Dialogue, discussion and brainstorming    |
| Teaching aids | White board – Data show – Scratch program |

### Unit Three Safe use of the internet

#### Lesson objectives:

By the end of the lesson, the student should be able to:  
 1- Identify the main concept of the safe use of the internet.  
 2- Acquire the main side of the internet safe use.  
 3- Understand the importance of the safe use of internet.

#### Warm up:

How can you use the internet in a safe way?

#### Lesson Presentation:

- ✿ **Identity Theft:** Impersonation or use of another person's name or any information related to him to steal him or others.
- ✿ **Malware:** It refers to hostile or intrusive programs that infiltrate computer systems, and to avoid them, antivirus programs must be used.
- ✿ **Spyware:** Computer programs that collect data about users without obtaining their consent and can be avoided by using anti-virus programs and malicious advertisements.
- ✿ **Virus:** A small, harmful program with the ability to self-propagate infecting computers and programs.
- ✿ **Secret codes:** we mean all personal data that should not be disclosed to anyone, such as passwords
- ✿ **Important instructions for the safe use of the Internet:**
  1. Keep your password and username safe and not published.
  2. Think carefully before posting personal photos or posting content on the Internet
  3. Concern sought permission before publishing pictures on the Internet or sending them by mail
  4. Do not accept any anonymous messages
  5. Do not add others to your friend list unless you know them personally
  6. Learn how to block and report certain people's access to you
  7. Realizing that online conversations are not private and can be stolen

#### Evaluation:

Complete: Spyware are .....